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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,713	09/28/2001	Marc Petit-Huguenin	PX8S.265PA	6397

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EXAMINER

NG, CHRISTINE Y

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/966,713

Applicant(s)

PETIT-HUGUENIN ET AL.

Examiner

Christine Ng

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 and 17 is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what the difference is between the endpoint device (line 2) and the gateway (line 7).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 5-8, and 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,674,745 to Schuster et al.

Referring to claims 1 and 7, Schuster et al disclose in Figure 1 a broadband telephony system, comprising:

A plurality of remote endpoint devices (ITG 18,20) coupled to a broadband data network (IP network 19).

A plurality of remote PSTNS (22,24) coupled between the plurality of remote endpoint devices (ITG 18,20) and a plurality of remote audio interfaces (10,12,14,16), each remote endpoint device being coupled to one remote PSTN (ITG 18 is connected to PSTN 22), each remote PSTN being coupled to more than one remote endpoint device (PSTN 22 is connected to ITG 18,20), each remote PSTN being coupled to at least one (2) remote audio interface (PSTN 22 is connected to devices 10,12), and each remote audio interface being coupled to one remote PSTN (devices 10,12 are connected to PSTN 22).

An originating endpoint device (ITG 18) coupled between the broadband data network and a local audio interface (10) adapted to communicate an audio signal (IP telephony call), the originating endpoint device adapted to select a destination audio interface (14) for delivery of the audio signal, the destination audio interface being one of the plurality of remote audio interfaces. Refer to Column 8, lines 26-65.

A database arrangement (AMS 40) adapted to determine a preferred path for the audio signal from the originating endpoint device (ITG 18) to the destination audio interface (14) by correlating each remote audio interface (10,12,14,16) with one of the plurality of remote PSTNS (22,24), and correlating each of the plurality of remote endpoint devices (ITG 18,20) with one of the plurality of remote PSTNS (22,24), the database arrangement being separately situated from the originating endpoint device (AMS 40 is not in ITG 18). AMS 40 associates each ITG 18,20 with the PSTN 22,24 in which the ITG is located. The AMS 40 also associates the NPA-NXX telephone number of the devices 10,12,14,16 with a PSTN 22,24 serving that NPA-NXX combination.

Refer to Column 4, lines 19-40; Column 6, lines 26-38; Column 7, lines 42-59; and Column 10, line 17 to Column 11, line 12.

Referring to claim 2, Schuster et al disclose in Figure 1 that the preferred path includes a destination endpoint device (ITG 20) wherein the destination endpoint device is one of the plurality of remote endpoint devices (ITG 18,20) being correlated to a destination PSTN (24), the destination PSTN being one of the plurality of remote PSTNs (22,24) being uniquely correlated to the destination audio interface (14). Refer to Column 8, lines 26-65. Furthermore, Schuster et al disclose each of the audio interfaces (10,12,14,16) communicating uncoded analog signals directly with a user, and the originating endpoint device (ITG 18) including an audio processing circuit adapted to receive the uncoded analog signals and communicate with the broadband data network (IP network 19) independent of any of the PSTNs. Devices 10 and 14 may be analog phones, since the PSTNs 22,24 convert the transmitted and received digital signals back to audio for each respective party to understand. Each ITG 18,20 also receives analog signals, digitizes voices signals, and then transmits the packet streams. Refer to Column 4, lines 41-47 and Column 8, lines 58-65.

Referring to claims 5 and 11, Schuster et al disclose in Figure 1 a local PSTN (22) coupled between the originating endpoint device (ITG 18) and the local audio interface (10), wherein the local audio interface is adapted to designate an identifier (phone number) associated with a destination audio interface (14) and communicate the identifier to the originating endpoint device (ITG 18) through the local PSTN (22), and the originating endpoint device (ITG 18) is adapted to select the destination audio

interface (14) responsive to the identifier designated by the local audio interface (10).

Refer to Column 8, lines 26-64.

Referring to claim 6, Schuster et al disclose in Figure 1 that the destination audio interface (14) is coupled to the destination endpoint device (ITG 20). Refer to Column 8, lines 26-64.

Referring to claim 8, Schuster et al disclose in Figure 1 that the database (AMS 40) is adapted to uniquely correlate each remote audio interface (10,12,14,16) with one of the plurality of remote endpoint devices (ITG 18,20), and the preferred path includes a destination endpoint device (ITG 20) wherein the destination endpoint device is one of the plurality of remote endpoint devices being correlated to the destination audio interface (14). AMS 40 associates each ITG 18,20 with the devices 10,12,14,16 that it serves. Refer to Column 4, lines 19-40; Column 6, lines 26-38; Column 7, lines 42-59; and Column 10, line 17 to Column 11, line 12. Furthermore, Schuster et al disclose each of the audio interfaces (10,12,14,16) communicating uncoded analog signals directly with a user, and the originating endpoint device (ITG 18) including an audio processing circuit adapted to receive the uncoded analog signals and communicate with the broadband data network (IP network 19) independent of any of the PSTNs. Refer to the rejection of claim 2.

Referring to claim 12, Schuster et al disclose in Figure 1 a method of sharing resources of a broadband telephony system using an originating endpoint device (ITG 18) coupled between a broadband data network (IP network 19) and a local audio interface (10) adapted to communicate an audio signal (IP telephony call), the

originating endpoint device adapted to select a destination audio interface (14) for delivery of the audio signal, the destination audio interface being one of a plurality of remote audio interfaces (14,16). Refer to the rejection of claims 1 and 7. The method comprises:

Registering with a registrar database arrangement (AMS 40) information from a plurality of user-provided gateways (ITG 18,20), each gateway coupled to a broadband data network (IP network 19) and one of a plurality of regional telephone networks (PSTN 22,24), and each of the plurality of regional telephone networks coupled to more than one gateway (each PSTN is indirectly coupled to both ITG's through IP network). Refer to Column 4, lines 13-22.

Storing in the registrar database arrangement correlation information associating each of a plurality of audio interfaces (10,12,14,16) and each gateway (ITG 18,20) with one of the plurality of regional telephone networks (PSTNs 22,24). Refer to the rejection of claims 1 and 7.

Exchanging with a plurality of other users, use of one user-provided gateway (originating ITG 18) as a remote network-terminating gateway for access to the registrar database and use of other user-provided gateways (destination ITG 20) as remote terminating gateways. An originating ITG accesses the registrar database (AMS 40) to obtain the destination ITG IP address in order to route the call over the IP network. The destination ITP serves as a gateway to the destination PSTN. Refer to Column 2, lines 5-31 and Column 4, lines 13-22.

At the originating endpoint device, processing uncoded analog signals and communicating representative audio signals with the broadband data network independent of any of the regional telephone networks. Refer to the rejection of claim 2.

Referring to claim 13, Schuster et al disclose that the method further comprises:

Selecting a destination audio interface (device 14 or 16).

Routing a request (signaling message) from an originating gateway (ITG 18) to the registrar database (AMS 40) for access to the destination audio interface.

Determining a preferred network path from the originating gateway to the destination audio interface, the preferred network path including a destination gateway (ITG 20), the destination gateway being one of the plurality of user-provided gateways associated with the regional telephone network (PSTN 24) associated with the destination audio interface. AMS 40 "provides address mapping information to each originating ITG, to enable to originating ITG to route the call over the IP network to an appropriate terminating ITG" (Column 4, lines 19-22). Refer to Column 8, lines 26-64.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 4, 9 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,674,745 to Schuster et al in view of U.S. Patent No. 6,873,616 to Fedyk et al.

Referring to claim 3, Schuster et al do not disclose that the path is a cost-preferred path.

Fedyk et al disclose that an exit gateway (Figure 1, G1) connected to a source end point (Figure 1, SEP 12) stores a database (Figure 2b). Each entry of the database identifies a cost associated with reaching different destinations through different gateways. The processor of the database selects the gateway through which the destination can be reached at the lowest cost. Refer to Column 2, lines 24-26; Column 4, line 31 to Column 5, line 7; and Column 5, lines 46-67. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the path is a cost-preferred path; the motivation being in order to choose the cheapest path to save money and bandwidth usage.

Referring to claim 4, Schuster et al does not disclose that the path includes a pre-defined path portion.

Fedyk et al disclose that an exit gateway (Figure 1, G1) connected to a source end point (Figure 1, SEP 12) stores a database (Figure 2b). Each entry of the database identifies a cost associated with reaching different destinations through different gateways. The processor of the database selects the gateway through which a selected destination can be reached at the lowest cost. An exit gateway G1 is given two possible pre-defined paths (through gateways G3 or G7) to reach a destination (B1,

C1, D1, D2). Refer to Column 2, lines 24-26; Column 4, line 31 to Column 5, line 7; and Column 5, lines 46-67. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the path includes a pre-defined path portion; the motivation being so that the gateway can choose from pre-defined paths which path is optimal, thereby saving resources since the gateway does not need to generate different possible paths each time.

Referring to claim 9, refer to the rejection of claim 3 and the rejection of claim 2.

Referring to claim 10, refer to the rejection of claim 4 and the rejection of claim 2.

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over No. 6,674,745 to Schuster et al in view of U.S. Patent No. 6,477,164 to Vargo et al.

Referring to claim 13, Schuster et al do not disclose that the method further comprises restricting use to the plurality of other users, of a user's gateway as a remote network-terminating gateway to a pre-determined maximum elapsed time within a periodic interval.

Vargo et al disclose in Figure 1 that at the originating gateway 114, a number of gateway subpackets are concatenated together to form a gateway voice packet 142. The gateway voice packet 142 is then sent to the originating transmux 124. The gateway subpackets may be sent to the originating transmux 124 after a predetermined period of time has elapsed, regardless of how many gateway subpackets have been concatenated. The originating transmux 124 then sends the packets across Internet network 124 to transmux 126 and then to destination gateway 116. Refer to Column 5, lines 5-21 and Column 6, lines 24-34. Therefore, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to include that the method further comprises restricting use to the plurality of other users, of a user's gateway as a remote network-terminating gateway to a pre-determined maximum elapsed time within a periodic interval, the motivation in order to quickly process the packets from the destination gateway even in the event that the network experiences congestion which may stall the transfer of packets to the destination gateway.

Referring to claim 14, Schuster et al do not disclose that the method further comprises restricting use to the plurality of other users, of a user's gateway as a remote network-terminating gateway to a pre-determined maximum number of calls.

Vargo et al disclose in Figure 1 that at the originating gateway 114, a number of gateway subpackets are concatenated together to form a gateway voice packet 142. The gateway voice packet 142 is then sent to the originating transmux 124. The transmux subpackets may be sent to the destination transmux 126 after a predetermined number of transmux subpackets are linked together. The destination transmux 126 then sends the packets to destination gateway 116. Refer to Column 5, lines 5-21 and Column 6, lines 24-34. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the method further comprises restricting use to the plurality of other users, of a user's gateway as a remote network-terminating gateway to a pre-determined maximum number of calls; the motivation being in order to prevent an overload of packets on the gateway.

Allowable Subject Matter

8. Claims 16 and 17 are allowed.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (571) 272-3124. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. Ng *CN*
December 27, 2005


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER